DOCUMENT RESUME

ED 157 886 SP 012 944

AUTHOR Pickering, Dennis A.
TITLE Designing a Teacher Education Program That Works.
PUB DATE 78
NOTE 21p.; Summary of a multimedia presentation given at the Annual Meeting, Association of Teacher Educators (58th, Las Vegas, Nevada, January 31-February 3, 1978), and at the Annual Conference, Association for Supervision and Curriculum Development (33rd, San Francisco, California, March 4-8, 1978)

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS College Programs; Curriculum Design; *Curriculum Planning; Elementary Education; Faculty Development; Higher Education; Individualized Curriculum; *Preservice Education; *Program Descriptions; *Program Design; Teacher Education; Teaching Guides; *Teaching Models

ABSTRACT

A Pittsburg (Kansas) State University program for individualizing preservice elementary teacher preparation is described, which emphasizes learning by doing through exposure to alternative teaching strategies. Intensive preparations made by the teaching faculty are discussedd (identifying needs and goals for students, formulating program objectives, scope and sequence construction, development of teaching guides, instructional strategy alternatives and evaluation processes). The result of this curriculum planning process, a series of learning experiences called the Curriculum and Instructional Strategy Model (CISM), is presented, its organization outlined, and its effect on faculty roles and student learning opportunities investigated. Basic to the new role of faculty using the CISM model is the change from controlling all planning processes to the sharing, with students, of responsibility for developing scope and sequence charts, lesson plans, and evaluation procedures. Faculty are also expected to provide exposure to a variety of alternative teaching strategies. This faculty role change means that students become active participants in the education process. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED157886

Designing a Teacher Education Program That Works

Dr. Dennis A. Pickering
Program Coordinator
Pittsburg State University
Pittsburg, Kansas

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Dr. Dennis A. Pickering

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Summary of the multi-media presentation given at the 58th annual meeting of the Association of Teacher Educators, Las Vegas, Nevada, January 31 - February 3, 1978 and at the 33rd annual conference of the Association for Supervision and Curriculum Development, San Francisco, California, March 4-8, 1978. Copyright: Dennis A. Pickering, 1978.

SP012 944

Designing A Teacher Education Program That Works

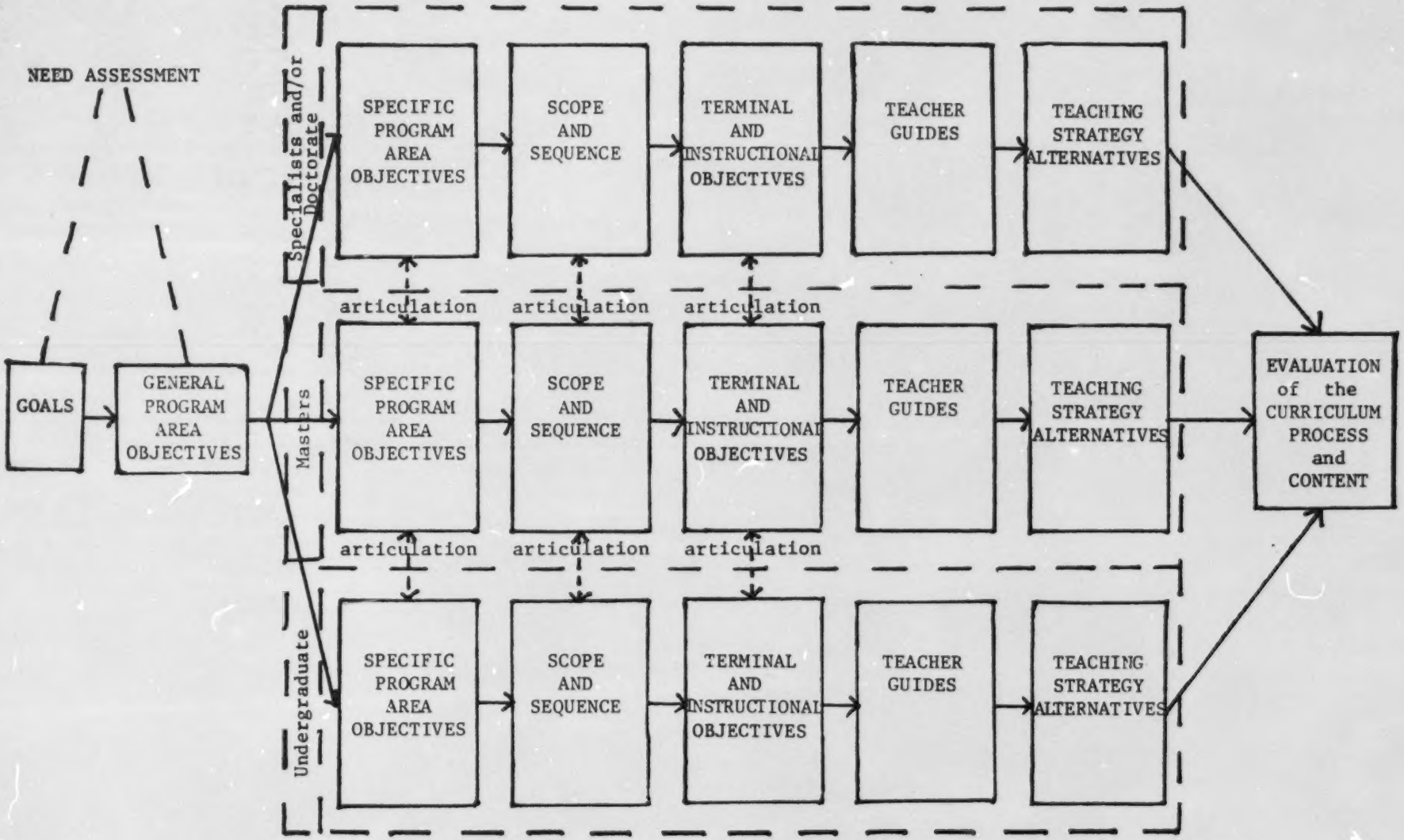
Dr. Dennis A. Pickering
Program Coordinator
Pittsburg State University
Pittsburg, Kansas

The purposes of my presentation today are two. I would first like to introduce you to the Staff Development Planning Process utilized in designing our new Individualized Elementary Teacher Preparation Program at Pittsburg State University. I would then like to highlight several features of our program with special attention given to the changing roles of faculty and the varied learning opportunities for students. Let us first turn our attention to the "human development planning process" which took place on our University campus.

Planning Process

In looking at our original course offerings for elementary education majors, it was felt that in order for significant improvements to occur in our program that changes would first need to take place in how we as faculty viewed ourselves and our roles in preparing teachers. Attention needed to be directed towards establishing systematic procedures whereby we, as faculty, could look at what we were presently doing, how strongly we valued what we were doing, and what changes we were willing to make in order to seek the most beneficial experiences possible for students. To assist us in this process, a curriculum planning model was designed by this writer (see Figure 1) based upon over five years of study working with numerous groups concerned with improving their program offerings.

Figure 1 -- PICKERING MODEL FOR HIGHER EDUCATION CURRICULUM DEVELOPMENT



Developed by Dr. Dennis A, Pickering, Pittsburg State University, 1975.

Needs Assessment

The first step in the process was to conduct a needs assessment which would serve as an input device about the present and desired program. Feedback from graduates, students presently involved in the professional course sequence, as well as input from various external studies such as NCATE provided us with some baseline data for our deliberations.

Numerous small group interaction sessions followed. Each session was designed to assist us in clarifying more fully what we truly valued from the assessment data collected.

Goal Development

Goals were then formulated based upon the valued aspects of the needs assessment data as well as from additional input received from those involved in the professional course sequence offered at PSU. Emphasis on selecting the four or five most important goals as seen by faculty was stressed. Other goals or aspects of the program were considered only after the staff had met with some degree of success in fulfilling the outcomes they felt were initially most important.

When working with a process model like the one diagrammed above, one needs to keep in mind that he or she must start where the faculty is in their thinking and behavior patterns and proceed to develop the potential of the faculty on an individual and group basis.

General Program Area Objectives

After formulating the agreed upon goals for the program, the next step was to identify the general program area objectives. This is a procedure of listing all the courses and specialized experiences one plans to offer in order to fulfill the goal statements. For example, if we had a goal related to the idea

of promoting the development of student abilities in the basic teaching areas, one might have the following general program area objectives:

> To provide method courses in the areas of reading, mathematics, language arts, social studies, and science.
>
> To provide experiences such as mini teaching and micro teaching sessions, preprofessional laboratory experiences as well as a full semester of student teaching.

Again, numerous small group interaction sessions were planned so that faculty could decide which courses and experiences they felt would be most beneficial in helping to fulfill the goals identified.

The goals and general program area objectives as diagrammed on the model are usually written to be utilized from the Bachelor's through the Doctoral level. Since we were particularly interested in looking at our Bachelor's degree program in elementary education, we proceeded from here to develop specific program area objectives for only the undergraduate program under consideration. Even though this was true, attention was given to the types of courses and experiences provided at the upper levels so that we maintained an adequate articulation throughout our program.

Specific Program Area Objectives

Specific program area objectives were then written which would more fully clarify the topic areas to be covered in the courses identified under general program area objectives. For example, in the course related to mathematics one might write the following specific program area objective:

> To provide mathematic courses which include the study of numbers, numerals and sets; mathematical operations; measurement; informal geometry; fractions; and decimals.

Scope and Sequence Construction

The next step in the process was for each team of subject specialists to identify the specific facts, skills, concepts, and generalizations to be learned in the specific program areas. The list of facts, skills, concepts, and generalizations, or the scope of the program along with an indication of the progression of the skills and concepts to be developed provided us with a complete scope and sequence of our programs.

Terminal and Instructional Objectives

Terminal and instructional objectives were then written for all areas. Terminal objectives are defined as the final student outcomes expected from instruction. Terminal objectives were written utilizing statements directly from our scope and sequence chart. Instructional objectives were then written as statements of intermediate learning outcomes that the instructors felt students would first need to accomplish in order to be able to fulfill the terminal objectives.[1]

From our experience in working with terminal and instructional objectives, we have found the need to occasionally go back and identify additional instructional objectives for certain terminal outcomes students continually have difficulty with in the program. On the other hand, we have also found the need to consolidate or even eliminate certain instructional objectives when students display the capability of handling larger segments of the learning task assigned.

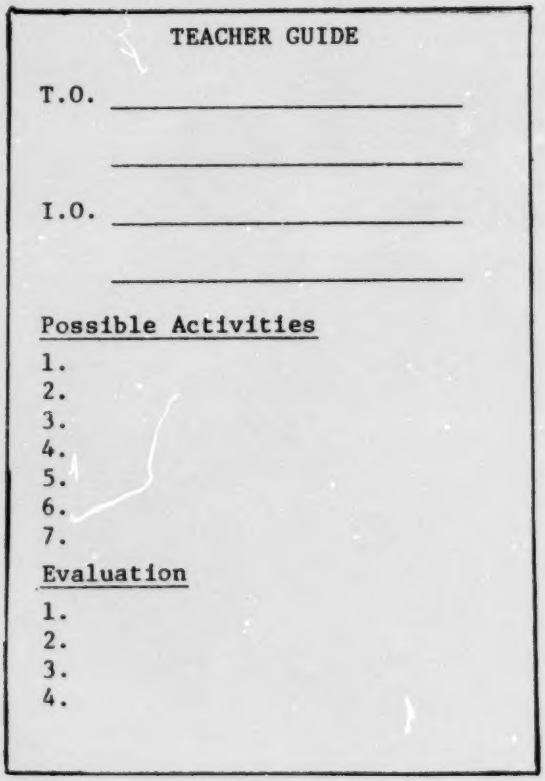
Teacher Guides

Once we had completed the writing of our terminal and instructional objectives, we were then ready to move on to writing lesson plans -- yes, lesson

[1]Richard W. Burns in his book entitled New Approaches To Behavioral Objectives, 2nd ed., William C. Brown Company Publishers, 1977, provides a complete explanation of how to write terminal and instructional objectives.

plans! It was felt that if we expected our students to utilize proper techniques of planning we had an obligation of providing a proper role model for them by adopting some type of daily lesson plan format for our teaching.

It was decided that we would use a format which this writer had designed and implemented with a great deal of success when working with public school teachers in various parts of the United States. These public school teachers wanted a format that would provide the necessary ingredients for a good lesson but that was easy to read and simple to write. "Teacher Guides" seemed to be the answer to their needs and therefore ours since we were interested in adopting a format that our students could pick up and use in their own teaching.


TEACHER GUIDE

T.O. _____

_____

I.O. _____

_____

Possible Activities

1.
2.
3.
4.
5.
6.
7.

Evaluation

1.
2.
3.
4.

FIGURE 2 -- Teacher Guide Page

In utilizing the Teacher Guide format, one has a clearly stated terminal and instructional objective at the top of the lesson plan page. Possible activities are then briefly stated to remind the instructor of the alternative teaching strategies available. Various evaluative procedures are provided for assessing the outcomes from instruction.

The guide pages are designed in such a way that they are cumulative guides. As the instructor develops alternative ways of teaching a certain aspect of the program, he or she lists the various means under the activity section. In other words, the Teacher Guides develop as the instructor grows in his or her ability to present that segment of their course in various ways to meet the needs of the individual learner. This same process holds true for the evaluation section as well. As the instructor becomes more aware of alternative procedures in evaluating student outcomes they are listed.

It was found that the guide pages could be sequenced according to the needs of the students being taught. If one student or a small group of students required certain skills before proceeding to other skill areas, activities from the appropriate guide pages could be assigned. Guide pages, in other words, provided us with greater opportunities for individualizing our instruction through alternative teaching strategies.

Teaching Strategy Alternatives

The key to this stage on the process model was the developing commitment on the part of faculty to teach as we would hope our students would teach. By providing learning opportunities both in direct and indirect modes of instruction, the faculty felt that we would be better able to guide students in formulating their own teaching styles. Each faculty member involved in the program, therefore, was expected to deliver their own course through such teaching

strategies as lecture, recitation, learning centers, learning packets, role playing, simulations, etc. The Teacher Guide pages provided faculty with the basic information needed for developing such alternative strategies.

Along with actually providing role models and alternative learning environments, many opportunities for students to try various approaches to teaching in both micro teaching and actual teaching situations have been incorporated into the program. Video tapes of these learning opportunities are continually being made so that each student with faculty guidance can review the progress which he or she is making.

Evaluation

The final stage of the model is the evaluation of the curriculum process and content. Process evaluation has to do with the systematic assessment of both the attitude and value changes which have taken place in those involved in designing and implementing the program. These changes can oftentimes be observed in the behavior changes of faculty through such means as their willingness to try something new; to develop their abilities in nonverbal and verbal behavior; etc.

Content evaluation has to do with the success one has in fulfilling the terminal outcomes identified in the scope of the program. Content evaluation is affected by the various methodologies utilized, the organizational sequencing of the learning experiences, and the actual materials provided in the instructional setting.

Adequate data on the long range impact of our program is not yet available but student feedback as well as visitor reaction has been most supportive. Let us now turn our attention to a brief look at the program itself.

Pittsburg State University's
Individualized Elementary Teacher Preparation Program

In this section of my presentation, I would like to look at the organization of the central module of our program which we call the Curriculum and Instructional Strategies Model (CISM). We feel the CISM is a unique feature of our program due to its design, content, and how it is actually presented. Second, I would like to focus my attention on the changing roles of faculty and what this means in light of learning opportunities for students.

Curriculum and Instructional Strategy Module

Throughout the planning process discussed earlier, it became quite apparent to those involved in the professional course sequence that similar experiences were being provided in all method courses. The repetitive nature of these experiences was cited by the graduates contacted in our needs assessment as one of the major weaknesses in our original program.

After careful consideration of a number of alternatives, it was decided that a central module of work called the Curriculum and Instructional Strategy Module (CISM) should be designed ~~in~~ such a way that once a student learns the basic skills defined that he or she would then proceed to utilize and enhance those skills in other method courses. The faculty had no desire however, to teach these fundamental skills in a prerequisite course format but instead to design a well planned, well articulated series of experiences in the areas of pre-planning, instructional media and technology, teaching, and evaluation which could be utilized by all subject area specialists.

The CISM was designed to be delivered utilizing an individualized multimedia approach including videotape sessions, slide/tape presentations, learning centers, learning packets, as well as simulation and gaming activities.

Segments of the module were organized to be monitored through the use of carefully written student contract forms (see Appendix A). The contracts include a statement of the terminal and instructional objectives to be learned; the media resources available for students to use in becoming knowledgeable about the objectives; various activity alternatives that they can do to demonstrate their understanding of the objectives; as well as, reporting alternatives for providing feedback to their instructors on how they went about accomplishing the contract outcomes.

Emphasis in the CISM is given to the fundamentals of curriculum planning including the formation of scope and sequence charts in the various subject areas, writing of objectives, developing well planned lessons, as well as alternative means of evaluating students' learning. Attention is also given to the fundamentals of how to teach utilizing direct and indirect modes of instruction, importance of non-verbal and verbal communication skills, as well as the selection and utilization of instructional media in the classroom.

Role of Faculty -

It was decided that in order for a faculty member to become a part of this new program, he or she must be willing to share in the responsibility of delivering the skills in the CISM module of work. This meant that the faculty member would be expected to provide opportunities for students to develop actual scope and sequence charts, lesson plans, and evaluative procedures which would pertain to their subject area. Hands on experiences in the selection and utilization of appropriate instructional materials was to be stressed as a definite part of their course as well.

Faculty involved were also expected to deliver their course utilizing a full spectrum of alternative teaching strategies in order to maximize the

learning opportunities for each and every student. By providing such varied role models it was hoped that students would have the opportunity to experience what it is actually like to be a learner in various types of learning environments. It was also felt that through such learning situations, students would be more likely to utilize such techniques not only in the micro teaching and actual teaching situations provided in the program but also in their own teaching situations after graduation.

Data on the degree of transfer or learning from exposure of a style (faculty use of the technique) -- to experimentation with a technique in a controlled environment (micro teaching and supervised teaching) -- to actual use in their own classrooms is not yet available. Early indications seem to point to a greater tendency from those exposed to the various techniques to be more likely to utilize such procedures in their own teaching situations.

General feedback from faculty involved in the program has been most encouraging. The key concern from faculty was the initial "risk" factor of trying new approaches when more traditional approaches had in their minds been successful in the past. Through continual support and encouragement by both administration and other faculty members, we have managed to make the intitial step which has led to a more varied and rich learning environment for students as well as higher levels of professional satisfaction on the part of faculty.

Student Experience

With the changes which we have made in our program, there has resulted more opportunities for students to select alternative learning experiences through more varied learning modes. The initial reaction of students was that of excitement, bewilderment, and in some cases initial frustration. Our students were not totally prepared to make decisions related to their own

learning. They had always been "spoon fed" concerning what to do, how to do it, and when it must be done.

We found that the key to the transformation from a program where students are told what to do to one where they are actually involved in making decisions about their learning is that of knowing who are the informal student leaders. By convincing the informal leaders of the importance of learning how to make decisions about their own learning, we found that we had not only the informal leaders as more positive learners, but the larger majority of all students as well. The informal leaders seem to have a direct influence over the other students in the program. The results have been that most students involved in the program today would not desire to go back to the old means of learning where assignments are spelled out in the more traditional manner. They like the opportunity of making choices with the support of faculty. The students have also expressed a great deal of appreciation in having multi-sensory materials for learning. Through such an approach, students have become much more sensitive to their own learning styles.

We have moved to change the role of students from one of a passive learner to that of an active participant in designing their learning experiences. Through the continual efforts of faculty to emphasize opportunities for student decision making and learning by doing, we feel that we have made definite strides toward fulfilling our goal of promoting the individual development of each and every student as an intelligent, articulate, dynamic human being capable of dealing with a multitude of challenges facing our profession today.

Conclusion

Pittsburg State University has been involved in a "human development planning process" which has resulted in an elementary teacher preparation program that emphasizes learning by doing through an exposure to alternative teaching strategies. Utilizing the curriculum planning process developed by one of its faculty members, PSU has been able to design a well articulated series of experiences called the Curriculum and Instructional Strategy Module which carefully guides students through the fundamental skills of pre-planning, instructional media and technology, teaching, and evaluation needed by the elementary teacher today.

In the three years that we at Pittsburg State University have been involved in systematically looking at our preparation program, we have learned many lessons; one of which we feel is of utmost importance. The success or failure of any program seems to be directly based upon the continual individual and group development which takes place as the planning stages evolve. Through a well articulated planning process which emphasizes positive group dynamics, planned communications, and ever continual emphasis on staff encouragement and development, a program will continue to grow. We at PSU do not anticipate and certainly do not desire to have our program reach its final stages of maturity because with it comes the eventual stagnation of the creative potential of our faculty.

Appendix A

Student Contract Form

STUDENT CONTRACT
for the
Module on Pre-planning an Educational Program

Preface

For this module of work you will be focusing your attention upon:

1. the fundamental steps in developing various curricular program areas, and
2. how such program development steps can be used to assist you in the actual preplanning of a lesson.

At the completion of this module you will be able to satisfactorily complete the following terminal objective:

TERMINAL OBJECTIVE: You will be able to identify the steps in the curriculum development process and be able to demonstrate your ability to apply the model by actually formulating curricular offerings in various subject areas.

INSTRUCTIONAL OBJECTIVES:

1. After being introduced to a model which depicts the various steps in the curriculum development process you will be able to name each step in order.

2. Through a review of selected literature you will be able to state in written form five major goals for an educational program.

3. You will be able to write at least four general system-wide objectives for each of the five major goals stated.

4. You will be able to state the specific system-wide objectives for the various subject areas being studied.

5. You will be able to identify and apply the fundamental principles of scope and sequence construction by actually developing such charts for the various subject areas studied.

MEDIA RESOURCE ALTERNATIVES

Instructional objective one: After being introduced to a model which depicts the various steps in the curriculum development process you will be able to name each step in order.

Directions: Select at least one of the following:

____ a cassette tape presentation entitled "A Model for Curriculum Development."

____ handout entitled "A Model for Curriculum Development."

____ a seminar session on curriculum development (Prerequisite: Completion of one of the above options before attendance at this session).

Instructional objective two: Through a review of selected literature you will be able to state in written form five major goals for an educational program.

Directions: Select at least two of the following:

____ Read the following: Doll, Ronald C. Curriculum Improvement: Decision Making and Process. Boston: Allyn and Bacon, Inc., 1974, pages 134, 139.

____ Read the following: Inlow, Gail M. The Emmergent in Curriculum. New York: John Wiley and Sons, Inc., 1973, pages 22-30.

____ Read: Burns, Richard W. New Approaches to Behavioral Objectives. Dubuque, Iowa: William C. Brown Co., 1972, pages 3 and 4.

____ Play: "Goal Card Selection Game."

Instructional objective three: You will be able to write at least four general system-wide objectives for each of the five major goals stated.

Directions: You are required to complete the first activity plus at least one additional one.

____ A cassette tape entitled "Developing system-wide general objectives."

____ Read the following: Ragan, William B., and Shepard, Gene D. Modern Elementary Curriculum. New York: Holt, Rinehart and Winston, Inc., 1971, pages 109-119.

____ Discuss with teachers in the field what they think are the major programs and experiences that relate to the four or five goals stated.

____ Select 4 or 5 other colleagues who will assist you in developing a composite list of general objectives for each of the major goals selected.

Instructional objective four: You will be able to state the specific system-wide objectives for the various subject areas being studied.

Directions: You are required to complete at least the first activity in this section.

____ A cassette tape presentation entitled "Formulating System-wide Objectives."

____ Listen to the cassette tape related to the CSE Elementary School Hierarchical Objectives Chart.

Instructional objective five: You will be able to identify and apply the fundamental principles of scope and sequence construction by actually developing such charts for the various subject areas studied.

Directions: Complete at least one of the following:

____ Read handout entitled "Steps in constructing a Scope and Sequence Chart."

____ Listen to cassette tape entitled "Steps in constructing a Scope and Sequence Chart."

ACTIVITIES ALTERNATIVES:

Select one of the following activities for purposes of demonstrating your competency in fulfilling the above stated objectives.

_____ Develop a curriculum program guide for the subject area or areas which you are studying. This guide should include a final statement of your goals, general and specific system-wide objectives, and a complete scope and sequence chart for at least two specific system-wide objectives areas.

_____ Develop a complete K-6 scope and sequence chart for each of the areas being studied. Use as your guide published materials available in the curriculum lab along with the assistance of your instructors. This chart should be based upon goals and general system-wide objectives which you have formulated.

_____ Formulate your own activity which will demonstrate your knowledge and understanding of the objectives stated above. Write up your proposal and submit it to your instructor for approval.

REPORTING ALTERNATIVES:

_____ Submit a typewritten "log" of the procedures you followed in fulfilling this contract. State your thoughts, actions, and reactions at various points through the process.

_____ Develop a media presentation which would summarize the procedure which you followed in fulfilling this contract.

_____ _____
(Student Signature) (Date)

_____ _____
(Instructor Signature) (Date)

Developed by Dr. Dennis A. Pickering, Curriculum Specialist, in cooperation with Pittsburg State University, June, 1977, September, 1978.

9-78